Veterinary rapid tests

Immunochromatographic rapid tests (also termed Lateral Flow Assays) were originally developed in the late 1980s as a rapid and simple pregnancy test. Since then, this method, which neither needs trained personnel nor dedicated laboratory equipment, has gained wide acceptance for a variety of point-of-care and field-use applications in human, veterinary and consumer diagnostics. From now, Henry Schein private brand is offering a wide range of Veterinary rapid tests. Each test contains 10 sets.

The range includes the following tests:

- Feline Leukemia Virus FeLV 9008297
- Feline Immunodeficiency Virus FIV 9008298
- Feline combi - FeLV + FIV 9008299
- Parvovirus – Parvo 9008300
- Borrelia – Ticks 9008301
- Corona 9008302
- Giardiosis - Diarhea 9008303
BORRELIA ANTIGEN TEST

The Borrelia antigen test is for the direct detection of Borrelia, the causative agent of Lyme borreliosis, in ticks. Lyme disease is a severe disease that is transmitted by ticks. The causative agent of Lyme disease, Borrelia burgdorferi sensu lato, is a gram-negative, spiral-shaped and agile bacterium (spirochete). Borrelia cannot survive in the environment. They are dependent on host organisms. Worldwide at least 13 genospecies belong to the Borrelia burgdorferi sensu lato complex. The three most important species are B. burgdorferi sensu stricto (Bss), B. garinii (Bg) and B. afzelii (Ba), which also are pathogenic for humans.

Borrelia are usually transmitted by ticks of the species Ixodes ricinus (common wood tick). In Europe the prevalence of Borrelia in ticks varies between different regions between 5 to 35%. An increased incidence of tick also differs seasonally, the so-called “tick season” is during the period from spring to autumn (March - October). In regions with a high prevalence of ticks animals can be infected with Borrelia several times a year. Ticks also can become infected by Borrelia repeatedly throughout their development cycle and therefore can also transmit mixed infections of different Borrelia species.

The clinical presentation of Lyme disease in dogs often develops insidiously and is characterized by nonspecific symptoms such as apathy, lymphadenopathy and intermittent fever. Possible clinical manifestations are caused by infections arthritis (inflammation) of one or more joints; also some alternating lameness and glomerulopathies (kidney disease) are occasionally described. In horses, the clinical Lyme disease is broadly discussed. Symptoms such as lameness, joint swelling, neurological and ocular changes were often observed after experimental infections.

Even with an effective antibiotic therapy is a complete pathogen elimination difficult, especially at a state of an advanced infection. Early antibiotic treatment is therefore essential for a successful therapy.

What are the benefits of Borrelia antigen test for the veterinarian and pet owner?

The Borrelia antigen test is for the direct detection of Borrelia (B. garinii, B. burgdorferi sensu stricto and B. afzelii) in the tick.

Ticks can be removed by the patient and directly examined for Borrelia. The result can be documented in the patient records. The direct detection of Borrelia in the tick and the documentation of a possible positive result in the patient records support the general diagnosis. At a later date occurring non-specific symptoms, such as fatigue, intermittent fever, or "borreliosis suspicious" symptoms, such as Joint problems can be better classified in an overall diagnosis and thus a more rapid and targeted therapy, which supports a more favorable prognosis for the patient.
Rapid test for the direct borrelia test within the tick

- Quick and easy testing
- Reliable proof of borrelia in a tick (B. garinii, B. afzelii and B. burgdorferi sensu stricto)
- Results visible within a few minutes
- Test can be done with all sizes of borrelia
- All required materials are in each test

Sampling

The sampling is of great importance for a meaningful testing. Remove the tick carefully and ensure that the head is also removed. For this, use tick tweezers (not supplied). Between removal and testing, you can keep the tick in the sample vessel supplied. Testing can immediately follow removal, but the tick should be tested no later than 2 days after removal. In case it is a small tick, please add two drops of fluid before crushing.

Attention:

When testing heavily engorged ticks: please add to the sample vessel 3 drops of tick blood and 4 drops of fluid.

**TESTING IN THE CASE OF SMALL-MEDIUM-SIZED TICKS**

1. Put the tick in the sample vessel, and fill the small tube with 2 drops of fluid.
2. Crush the tick using both ends of the wooden stick.
3. If necessary, add 1–3 more drops of fluid, so that there is enough fluid for testing.
   - Make sure that the fluid is slightly coloured. If not, the tick has to be crushed further.
4. Add a drop of the tick juice to the test field of the test cassette.
5. Then add two drops of fluid. The fluid will flow up the test strip.
   - If this stops, a further drop of fluid can be added to the test field.

NB: after the tick has been crushed, the fluid must become slightly coloured.
TESTING IN THE CASE OF LARGE TICKS

1. Put the engorged tick in the sample vessel.
2. Crush the tick vigorously using the wooden stick (pointed side) provided.
3. Use the pipette (from the test cassette bag) to take up tick juice.
4. Add a drop of the tick juice to the test field of the test cassette.
5. Then add two drops of fluid. The fluid will begin to flow up the test strip.
   If this stops, a further drop of fluid can be added to the test field.

NB: the more liquid the tick juice, the better it will flow on the cassette. Thick tick juice can result in slow movement.

ANALYSIS

After 5 minutes, the test can be analysed. One or two red lines appear in the reaction field.

POSITIVE TEST RESULT:
The test line and the control line are visible (i.e. - two lines become visible).

NB: even a faint test line should be interpreted as a positive test result.

NEGATIVE RESULT:
Only the control line is visible.

INVALID:
If no control line is shown, the test is invalid. NB: the maximum time from start to reading the result is 20 minutes. All results read after 20 minutes are invalid.

STORAGE:
- Protect from moisture
- Store between 4°C and 30°C
- Sampling material should be used on the same day of extracting
- Cassettes should not be frozen
PARVOVIRUS / CORONAVIRUS ANTIGEN TESTS

Infection with parvovirus in dogs:
- The canine parvovirus (CPV) infection (parvo) is a highly contagious viral disease found worldwide, which is especially for unvaccinated dogs, a great and sometimes deadly risk.
- The inclination of the virus to cells with a high division rate affects especially cells in the intestine and thus destroys the villi completely. The dogs have diarrhea and vomiting; in severe cases bloody diarrhea, low temperature and dehydration.
- Deaths occur mainly in young or unvaccinated dogs.
- With infections of the bone marrow immune cells are infected which leads to a decrease in lymphocytes and leukocytes in the blood (lympho-and leukopenia). An infection in puppies can cause heart muscle damages.
- The severity of the disease depends on the age of the animals, its immune status, and possible secondary infections, e.g. with coronaviruses.
- Since the symptoms both of a mild coronavirus, and parvovirus infection of dogs as well as in severe cases of diarrhea are similar, for suspicions of having a co-infection of coronavirus and parvovirus, a parallel testing of coronavirus is recommended.

Infections with Parvovirus in cats:
- The Feline parvovirus (FPV) is a trigger for the feline panleukopenia and it occurs especially in puppies that come from regions where cat populations have an insufficient vaccination. The clinical symptoms are often nonspecific.
- The destruction of the crypt in the intestine leads to enteritis (intestinal inflammation), which only seldom leads to bloody diarrhea.
- It also can come to an infection of the bone marrow, which leads to a massive decrease of circulating white blood cells (panleukopenia). This results in an impaired immune response which is characterized by secondary infections.
- The course of disease of Feline Panleukopenie in unprotected puppies is often fatal.
- A specialty of FPV is that it can cross the placental barrier. During pregnancy, it is therefore liable to infect the fetus which usually leads to the death of the fetus

Infections with coronaviruses in dogs:
- The Feline parvovirus (FPV) is a trigger for the feline panleukopenia and it occurs especially in puppies that come from regions where cat populations have an insufficient vaccination. The clinical symptoms are often nonspecific.
- The destruction of the crypt in the intestine leads to enteritis (intestinal inflammation), which only seldom leads to bloody diarrhea.
- It also can come to an infection of the bone marrow, which leads to a massive decrease of circulating white blood cells (panleukopenia). This results in an impaired immune response which is characterized by secondary infections.
- The course of disease of Feline Panleukopenie in unprotected puppies is often fatal.
- A specialty of FPV is that it can cross the placental barrier. During pregnancy, it is therefore liable to infect the fetus which usually leads to the death of the fetus

Infections with coronaviruses in dogs:
- The Canine coronavirus (CCV) is widespread in the dog populations and does not generally cause a disease.
- The transmission of coronaviruses occurs for example by mutual sniffing dogs or through the feces of infected animals.
- An infection can cause mild intestinal inflammation. Its importance as a pathogen in dogs is relatively low. Normally the infections are asymptomatic.
- However, viral shedders can lead to problems in dog breeding. Resulting enteritis can also serve as a precursor of a secondary infection.
- As symptoms dogs show a few days of vomiting, mushy, foul-smelling diarrhea and slightly elevated body temperature.
- In severe diarrheal events a suspicion of having a secondary infection with parvovirus should always be checked.
- Since both the symptoms of a mild coronavirus and parvovirus infections in dogs are similar, as also in severe cases of diarrhea a possible co-infection of coronavirus and parvovirus can be suspected, therefore a combined diagnosis with parvoviruses is recommended.
Infections with coronaviruses in cats:
- Coronaviruses can cause slimy intestinal infections in cats or in rare cases, a feline infectious peritonitis (FIP).
- The infection with feline coronavirus (FCoV) often is oronasal. The viruses are excreted in the feces from cats with a FCoV intestinal infection or from cats with a FIP (feline infectious peritonitis) infection.
- Infections with FCoV destroy the villi which lead to an intestinal infection with fever. Subsequently a persistent intestinal infection of cats may occur. These animals shed the virus intermittently (linear manner with interruptions) for several months or even a lifetime without showing clinical symptoms themselves and provide a permanent source of infection for other cats.
- Generally it should be made a differentiation between a FCoV and FIP infection, because not every infection with feline coronavirus leads to a feline infectious peritonitis (FIP). A FIP can develop in infected cats with coronavirus. It develops when the replication of the virus in the host causes a mutation in the virus genome.
- Particularly young or immunosuppressed cats are affected. About 50% of with a FIP infected animals are younger than 12 months, 70% are younger than 4 years.
- The appearance of a FIP disease is varied and often nonspecific.
- Therefore, in cats with recurrent fever, chronic weight loss, organ changes of unknown origin and antibiotic-resistant therapy trials, as well as in all cats with effusions into body cavities, the presumptive diagnosis of FIP can be made. For prognostic reasons and to avoid a possibly long ordeal of cats, a fast diagnosis is crucial.
- The Canine coronavirus (CCV) is closely associated with the feline coronavirus (FCoV) and it is also infectious for cats can cause feline enteritis, a Feline infectious peritonitis (FIP).
- Recent studies have shown that some isolates represent the feline infectious peritonitis virus are the recombinant of canine coronavirus and feline coronavirus.

Why is a joint detection of parvo and corona viruses in dogs and cats possible?
The canine coronavirus (CCV) and the feline coronavirus (FCoV), as well as the canine parvovirus (CPV) and the feline parvovirus (FPV) are similar in 99% of their DNA structure (genome).

Why makes a simultaneous detection of parvo and corona viruses in dogs and cats sense?
The simultaneous detection of parvo and coronavirus viruses in dogs and cats makes sense, because the symptoms of a mild coronavirus and parvovirus infection are often very similar.
- A simultaneous infection with both pathogens can lead to very severe and fatal disease progressions. For the therapeutic approach and prognosis the diagnosis of the specific pathogen is important.
- A fecal examination makes sense to distinguish a CCV infection in dogs from other causes of diarrhea and to identify clinically unapparent CCV shedders, especially in large households with larger cats or dogs husbandries.
- The Canine coronavirus (CCV) is closely related with the feline coronavirus (FCoV) and also infectious for cats. CCV can cause enteritis in cats.
- The fecal examination makes sense for cats to distinguish a FCoV infection from other causes of diarrhea or to identify clinically unapparent FCoV shedders.
- Each new animal to an existing cat population should be tested on existing FCoV antigens. So FCoV shedders can be detected and possibly separated.

To consider in case of a negative test result:
Viruses are always excreted intermittently, so that in case of a negative test result in suspected cases a repeat test should be performed.

To be observed in case of positive test results:
- Dogs and cats are vaccinated for protection against parvovirus with live attenuated vaccines. This vaccination can interfere up to 12 days after the vaccination with the test results and may give false positive results.
- A positive coronavirus antigen test in cats indicates the presence of coronaviruses, but only for 1-5% of cats with feline coronavirus infection develop later a FIP.
Reliable rapid test for the suspicion of canine corona virus

- User-friendly
- Immediate on-site diagnostics
- Quick results visible within few minutes
- No extra materials needed

**Sampling:**
Due to the practical test tube sampling on site is much less complicated and can be easily carried out under hygienic conditions.

**TESTING**
Take a stool sample using the cotton bud provided. Make sure that the upper end of the cotton bud is covered. Unscrew the test tube and place the cotton bud with the stool inside. Swirl the bud around in the fluid several times, so that the sample material becomes loose. Screw the test tube shut. Agitate vigorously to mix the contents until the fluid discolours. Break the pipette seal of the test tube by applying sharp pressure. Open the test cassette packaging and place the cassette on a horizontal surface. By applying gentle pressure, you can apply three drops of the sample material to the test field of the test cassette. If, after the first three drops, the fluid has not yet started to flow across the test strips, add a further drop.

**ANALYSIS**
After few minutes, the test can be analysed. One or two red lines appear in the reaction field.

**POSITIVE TEST RESULT:**
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*NB: even a faint test line should be interpreted as a positive test result.*

**NEGATIVE RESULT:**
Only the control line is visible.

**INVALID:**
If no control line is shown, the test is invalid. *NB: the maximum time from start to reading the result is 20 minutes.* All results read after 20 minutes are invalid.

**Storage:**
- Protect from moisture
- Store between 4°C and 30°C
- Cassettes should not be frozen
- The samples can be cooled between 2-8°C for up to two days and stored at -20°C for several days
Reliable rapid test is used for parovirus (CPV and FPV) antigen stool samples

- User-friendly
- Immediate on-site diagnostics
- Quick results visible within few minutes
- No extra materials needed

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FIV ANTIBODY TEST

The feline immunodeficiency virus infection (FIV) is caused by the feline immunodeficiency virus, a retrovirus that belongs to the subfamily of lentiviruses. It is an RNA virus. FIV is a common viral disease in cats, which damages the immune system.

The disease pattern are usually caused by secondary infections (fever, anorexia, lymphadenopathy) and not caused by the virus itself. In addition to these symptoms mainly stomatitis (inflammation of the oral mucosa), neurological deficits and an increased tumor tendency are possible symptoms. The incubation time after an infection can be different for each animal. Some cats may experience the first symptoms a few days after an infection, for other animals this may take weeks, months or sometimes years.

An infection occurs primarily through bite wounds. Therefore all free-range, non-neutered male cats belong to the primer "risk group" (ranking battles). FIV occurs rather seldom with cats which only live indoor.

With the FIV antibody test existing antibodies against the virus-specific proteins of FIV are detected. Usually already after two to four weeks after an infection a measurable antibody level is reached, so that the antibody test can be used. It is important to know, that after a direct infection or in the late course of the disease, after the collapse of the immune system, antibodies are barely detectable.

Which cats should be tested with FIV antibody test?

• Any sick cat with chronic, persistent or recurrent infection of unknown origin should be tested for an existing FIV infection, as this influences both the prognosis, the applied therapeutic measures and how the animals are kept.
• Each new cat in an existing cat population should be tested for present FIV antibodies.
• The FIV status of every cat should be known be tested routinely (annually for free-range cats).

Possible test results / test interpretation for a FIV antibody test:

A negative antibody test result may
• be from a non-infected cat
• or from an infected cat in the early phase of a FIV infection (up to 2 weeks p. Inf.), when still not enough antibodies have been formed
• or from a cat in the final stages of the disease when the concentration of antibodies in the blood falls below the detection limit due to high immune suppression.

A positive antibody test result cat
• can be from an infected cat
• or from a kitten, up to the age of 6 months with maternal antibodies. These puppies are usually not affected, because FIV is rarely transmitted in utero. Nevertheless a test should be repeated at a later stage.

The aim of therapy is always:
• to strengthen the immune system and prevent further infections. A curative therapy is not possible. Currently not approved vaccine against FIV is available in the EU
• For a FIV-infected cat a semi-annual "health check" should be performed to detect clinical changes in time and to treat them symptomatically.
• FIV-infected cats should be kept indoors or free-range cats should be neutered (to avoid rank fighting), and also the cats regularly wormed and vaccinated to prevent additional infections and infections of other own cats.
FELV ANTIGEN TEST

The feline leukemia virus infection is caused by the feline immunodeficiency virus, a retrovirus. FeLV is a common viral disease in cats, which damages the immune system.

Transmission: The excretion of FeLV occurs primarily in the saliva of infected cats, the most transmission is primarily oronasal by sniffing, mutual grooming, or in joint dropping and feeding grounds. Also, a placental (via the placenta away) infection is possible. The course of the disease varies greatly and is dependent both on the immune status of the cat, as well as their risk of infection. Young cats are more susceptible than older cats and also more likely develop a persistent viremia (presence of the virus).

The infection proceeds in several phases, rarely all phases pass up to the persistent viremia. The course of the disease depends on the immune status of the cat. Most of the infected animals stop the infection 3-16 weeks post infection and develop in this time a transient viremia. Is the immune response of the cat not sufficient to eliminate the pathogens the cat remains persistently viremic, thus is a life "shedder."

A FeLV infection may be present for a long time without symptoms. The disease patterns are diverse and a diagnosis based on the clinical picture is hardly possible. The disease can be divided into primary infection symptoms, that are directly a result of the viral infection, and secondary infection symptoms.

The diagnosis of a FeLV infection (viremia) can be performed with the FeLV antigen test by the detection of FeLV antigens in the peripheral blood. The antigen detection is possible about 3 weeks after infection.

Which cats should be tested with the FeLV antigen test?
- Any sick cat with chronic, persistent or recurrent infection of unknown origin should be tested for FeLV-existing (or FIV), as this influences both the prognosis and the therapeutic measures.
- Each new cat in a cat population should be tested for FeLV-existing antigens (and/or FIV antibodies).
- The FeLV (and FIV) status for every cat should be known and can be identified routinely (annually for free-range cats) and before vaccinations.
- For a FeLV infection, there is no "real" treatment option. Therefore, prevention is very important.
Possible test results / interpretations:
A one-time positive FeLV antigen test result can be from a cat
• with transient viremia
• or from a cat with persistent viremia.
• In order to distinguish a transient viremia from a persistent one, a new test should be performed after 6 weeks, then if still positive, another one after another 10 weeks.

A negative FeLV antigen test result can be from a
• non-infected cat
• latently infected cat
• cat in the first three weeks of a FeLV infection. Therefore, the test should be repeated at a later stage.

FIV antibody-FeLV antigen combined test

The FeLV/FIV combined test is for the rapid and reliable detection of feline (FeLV p27) antigen and the detection of antibodies against feline immunodeficiency virus (FIV) in whole blood, serum or plasma of cats. The combined rapid test for the detection of FeLV (antigen) and FIV (antibodies) can be routinely performed with a blood sample (blood, plasma or serum). The symptoms of a FeLV/FIV infection are mostly (75%) due to secondary infections (fever, anorexia, lymphadenopathy) and not caused by the virus itself. Therefore for a chronic, treatment-resistant disease of unknown origin, for the differential diagnosis a FeLV or FIV infection should always be considered.

<table>
<thead>
<tr>
<th>FIV</th>
<th>FeLV</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Virus</strong></td>
<td><strong>Lentivirus</strong></td>
</tr>
<tr>
<td><strong>Disease</strong></td>
<td>Feline immunodeficiency “Cats HIV”</td>
</tr>
<tr>
<td><strong>Risk group</strong></td>
<td>unneutered free running male cat for pure indoor cats seldom</td>
</tr>
<tr>
<td><strong>Transmission</strong></td>
<td>Primarily through a bite</td>
</tr>
<tr>
<td><strong>Prevalence</strong></td>
<td>Clinically healthy 2-3% Clinically ill: 13-19%</td>
</tr>
<tr>
<td><strong>Immunosuppressant</strong></td>
<td>often</td>
</tr>
<tr>
<td><strong>Diagnosis (routine)</strong></td>
<td>Antibody detection</td>
</tr>
<tr>
<td><strong>Prophylaxis</strong></td>
<td>Vaccination (only in the USA)</td>
</tr>
<tr>
<td><strong>Prognosis</strong></td>
<td>Life expectancy is not reduced, can live for years without symptoms</td>
</tr>
<tr>
<td><strong>Symptoms:</strong></td>
<td>Stomatitis, neurological symptoms, immune-mediated diseases, secondary infections, increased tumor incidence</td>
</tr>
</tbody>
</table>
Reliable rapid test for determination of FeLV and FIV in blood, plasma and serum
Available as a combi test (9008299) and two separate single tests (9008297 and 9008298)

- User-friendly and reliable
- on-site diagnostics within few minutes
- can be used with full blood, serum or plasma

HANDLING THE SAMPLE
Do not keep the samples at room temperature for too long. Serum and plasma can be stored between 2–8°C for up to 3 days. For longer storage, the samples should be frozen at below -20°C. Venous full blood should be stored between 2–8°C, if the test is due to be carried out within 2 days from sampling. Do not freeze full blood samples. If samples are being shipped somewhere, they should be packed in accordance with local regulations concerning aetiological agents. Bring the samples to room temperature before testing. Frozen samples must be fully thawed before testing and mixed well. Samples should not be refrozen and re-thawed.

General instructions for the use of blood samples:
Separate the serum or plasma as rapidly as possible from the blood, to avoid haemolysis. Heparin blood and EDTA blood can be used to extract plasma. Only use clear rather than haemolysed samples. Testing should take place immediately after sampling.

TESTING IN THE CASE OF SERUM AND PLASMA
1. Take blood from the cat and extract the serum or plasma. Using the pipette from the test cassette pouch, take up the sample material obtained. Add a drop of the sample material to the two test fields. Let the sample material soak in for a few seconds.
2. Open the reagent vial and add two drops to each of the test fields. The fluid begins to flow up the test strip. If the fluid does not begin to flow up after a few seconds, add a further drop to the reagent vial.
3. Add three drops of the mixtures to each of the test fields. If the fluid does not begin to flow up after a few seconds, add a further drop of fluid.
TESTING FULL BLOOD
1. Take blood from the cat. Using the pipette, supplied in the test cassette pouch, take up the full blood obtained immediately and add 2 drops to the sample vessel supplied. Then open the reagent vial and add a total of 6 drops of fluid.
2. Close the sample vessel and shake well. Re-open and take up enough sample material using the pipette.
3. Add three drops of the mixtures to each of the test fields. If the fluid does not begin to flow up after a few seconds, add a further drop of fluid.

ANALYSIS
After 5 minutes, the test can be analysed. One or two red lines appear in the reaction field.

POSITIVE TEST RESULT:
The test line and the control line are visible (i.e. two lines become visible).

NB: even a faint test line should be interpreted as a positive test result.

NEGATIVE RESULT:
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If no control line is shown, the test is invalid. NB: the maximum time from start to reading the result is 20 minutes. All results read after 20 minutes are invalid.

Storage:
• Protect from moisture
• Storage between 4°C and 30°C
• Cassettes should not be frozen
• Sampling material should be used on the same day of extracting
Giardia antigen test

Giardiasis is a worldwide occurring, with a usually clinically latent course, parasitic intestinal disease with different severities in dogs and cats. A clinically manifestation of the giardiasis occurs mainly in young animals. Giardia is besides nematodes (roundworms), the most common Endoparasitose in cats and dogs. A giardiasis is caused by Giardia duodenalis (syn. Giardia lamblia, Giardia intestinalis).

The pathogen is one of the single-celled intestinal parasites (protozoa, flagellates). Its life cycle has two distinct forms of parasites, the moving and viable trophozoites, settle in the small intestine of infected animals, and the against environmental influences highly resistant cysts (high tenacity). The cysts develop in the small intestine of dogs and cats and are excreted in the feces. Dogs and cats become infected by direct uptake of infectious cysts by licking, through drinking with cysts contaminated water or contaminated food. Giardia cysts are infectious for up to 3 weeks in cool water up to 3 months in the outside world and also in feces-soiled fur and skin of animals.

10 cysts are enough to cause an infection. After an oral intake the cysts develop in the small intestine to the moving, viable trophozoites. These attach to the mucosal surface of the small intestine. These destroy the intestine surface which leads to a malabsorption (decreased absorption of important nutrients), catarrhal diarrhea and bacterial secondary infections. In Giardia, the prepatent period, i.e. the onset of infectious cysts in the feces after oral uptake, is 4-10 days. Excretion occurs intermittently, not with every defecation.

The prevalence of Giardia in dogs and cats e.g. in Germany is 26.8% and 18.7%. The problem of giardiasis is the high tenacity (survivability) of the cysts. Especially in larger breeds, animal shelters or kennels reinfection is almost inevitable. Therefore, the focus in the fight against giardiasis lays in the detection of clinically healthy shedders, its treatment and a thorough disinfection of environment with effective products.

Giardia antigen test

The Giardia antigen test is an immunochromatographic rapid test for detection of Giardia-specific antigens, the cysts and trophozoites in the fecal material. The test is validated for dogs and cats.

When should the Giardia antigen test be used, what's important?

The Giardia antigen test should always be performed with chronic recurrent, intractable diarrhea of unclear origin in dogs and cats, especially when puppies and kittens are affected.

The Giardia antigen test is suitable as a screening tool for monitoring the hygiene management after remediation of problematic dog and cat husbandries. For this collective or individual fecal samples can be examined for Giardia.

The Giardia antigen test could be carried out prophylactically to protect new entrants into an existing husbandry, since animals are often asymptomatic carriers. Important note: Due to the intermittent excretion of cysts, which vary greatly in their intensity and temporarily suspend, always 3 different fecal samples (also pooled feces samples) over a period of three to ten days should be tested.

It should also always be remembered that Giardia are zoonotic. Therefore small children and people with immunosuppressive diseases, having close contact with the animals, are at risk of an infection.
The reliable rapid test is used for Giardia antigen stool samples

- User-friendly
- Immediate on-site diagnostics
- Quick results visible within few minutes
- No extra materials needed

**Sampling:**
Due to the practical test tube sampling on site is much less complicated and can be easily carried out under hygienic conditions.

**TESTING**
Take a stool sample using the cotton bud provided. Make sure that the upper end of the cotton bud is covered. Unscrew the test tube and place the cotton bud with the stool inside. Swirl the bud around in the fluid several times, so that the sample material becomes loose. Screw the test tube shut. Agitate vigorously to mix the contents until the fluid discolours. Break the pipette seal of the test tube by applying sharp pressure. Open the test cassette packaging and place the cassette on a horizontal surface. By applying gentle pressure, you can apply three drops of the sample material to the test field of the test cassette. If, after the first three drops, the fluid has not yet started to flow across the test strips, add a further drop.

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- The samples can be cooled between 2-8°C for up to two days and stored at -20°C for several days
Advantages of the products

Shelf-life:

1. The products have a general shelf-life of 18 month (24 month for all but FeIV and FIV Test).
2. The Snap-Tests have a general shelf-life of 6 month.

Storage:

1. The tests can be stored at room temperature.
2. The Snap-Tests have to be stored in a refrigerator.

Application:

1. The tests can be used instantly.
2. The Snap-Tests have to acclimate to room temperature for 30 minutes.
3. The tests are very silent. The „Snap“ of the snap-tests can disturb already agitated cats.

Price:

1. The tests are far more favorable price compared to Snap-Tests.
2. This does especially help when using Giardia-Tests, since those have to be used several times in the diagnosis.